

## State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Tommy G. Thompson, Governor  
George E. Meyer, Secretary  
Gloria L. McCutcheon, Regional Director

Southeast Regional Headquarters  
2300 N. Dr. ML King Drive, PO Box 12436  
Milwaukee, Wisconsin 53212-0436  
Telephone 414-263-8500  
FAX 414-263-8483  
TDD 414-263-8713

April 7, 1999

Mr. Rick Mechanic  
3027 W. Concordia Ave.  
P.O. Box 16736  
Milwaukee, WI 53216

FID# 241793310  
BRRTS# 0341004783

Subject: Closure request for Standard Scrap located at 3156 N. 31st St., Milwaukee, WI

Dear Mr. Mechanic:

The Department has reviewed your most recent submittal, dated February 4, 1999, and any additional information pertaining to the above mentioned site. The Department concurs with your consultant that no further action is necessary at this time. All Monitoring wells must be abandoned within 60 days in accordance to ch. NR 141.25, WAC.

A deed restriction is not necessary at this time for closure because the SPLP results showed that the remaining soil contamination would not affect the groundwater above NR 140, WI Adm. Code (WAC), enforcement standards and because the volume (125 yds<sup>3</sup>) of contaminated soils remaining on-site above the site-specific residual contaminate levels (SSRCLs) is relatively small. However, since there is contamination remaining underneath the building above the SSRCLs, these soils must be handled and disposed of properly if in the future they are disturbed for any reason.

For closure, a groundwater use restriction must be placed on the property. The groundwater use restriction shall contain a specific legal description of the property; the location, type, and concentrations of contaminants; and must include the standard language:

*"Natural attenuation has been approved by the Department of Natural Resources to remediate groundwater exceeding ch. NR 140 groundwater standards within the boundaries of this property. Construction of wells where the water quality exceeds the drinking water standards in ch. NR 809 is restricted by chs. NR 811 and NR 812. Special well construction standards or water treatment requirements, or both, or well construction prohibitions may apply. Anyone who proposes to construct or reconstruct a well on this property is required to contact the Department of Natural Resources' Bureau of Drinking Water and Groundwater to determine what specific requirements are applicable prior to constructing or reconstruction a well on this property."*

After Departmental approval of the draft groundwater use restriction, receipt of a certified copy of the groundwater use restriction, and receipt of monitoring well abandonment documentation this site will be in compliance with NR 726, WAC, and will be officially closed and tracked as such on the Department's tracking system.

For expedient processing, please send all future correspondence to the attention of RR Program Assistant at the above address. Please include that I, Michelle McGee, am the current reviewer of the case.

Interim guidance on institutional controls may be found on the DNR's web site (<http://www.dnr.state.wi.us>) by searching "RR PDF Documents" or by calling the publication request line at (608)264-6009.

If you have any questions regarding this letter, please contact me at the above address or at (414)263-8644.

Sincerely,

A handwritten signature in cursive script that reads "Michelle M. McGee". The signature is written in dark ink and is positioned above the printed name.

Michelle M. McGee

Hydrogeologist

Remediation and Redevelopment Program

cc: Pete Pavalko, Advent Environmental Svc., Inc.  
SER case file

7736987

REEL 4554 IMAGE 686

Document  
Number

## GROUNDWATER USE RESTRICTION

Declaration of Restriction

In Re: FOREST PARK IN SE ¼ SEC 12-7-21  
 BLOCK 4 (IN 12.2' LOT 32 & LOT 33 & S 17.8' LOT  
 34) & W ½  
 VAC ALLEY ADJ & E 20' VAC 31<sup>ST</sup> ST ADJ

 REGISTER'S OFFICE } SS  
 MILWAUKEE COUNTY, WI }  
 RECORDED

'99 MAY -3 A8:18

 REEL 4554 IMAGE 686-687  
 Walter A. Carey REGISTER  
 OF DEEDS
Recording Area
 Return to:  
 Peter E. Pavalko  
 Advent Environmental Services, Inc.  
 10845 N. Buntrock Ave., 64W  
 Mequon, WI 53092

 STATE OF WISCONSIN )  
 ) ss  
 COUNTY OF MILWAUKEE )
Tax Key#: 286-0772-100-0

WHEREAS, Mr. Morris Mechanic, is the owner of the above-described property.

 7736987  
 RECORD 12.00

WHEREAS, one or more discharges of gasoline and/or diesel fuel (petroleum) have occurred at this property. Petroleum contaminated groundwater above the NR 140 enforcement standard (ES) exists on this property at the following location: On the western one-half of the property, beneath the west end of the building and to the west property line, but not west of North 31<sup>st</sup> Street. The groundwater in this area is contaminated with benzene above the NR 140 ES and with xylenes above the NR 140 preventive action limit. The following numbers are the Wisconsin Department of Natural Resources case numbers associated with the petroleum release at this site: BRRTS No. 03-41-004783, Facility ID No. 241793310.

WHEREAS, it is the desire and intention of the property owner to impose on the property restrictions which will make it unnecessary to conduct additional soil or groundwater remediation activities on the property at the present time.

NOW THEREFORE, the owner hereby declares that all of the property described above is held and shall be held, conveyed or encumbered, leased, rented, used, occupied, and improved subject to the following limitation and restrictions:

Natural attenuation has been approved by the Department of Natural Resources to remediate groundwater exceeding ch. NR 140 groundwater standards within the boundaries of this property. Construction of wells where the water quality exceeds the drinking water standards in ch. 809 is restricted by chs. NR 811 and NR 812. Special well construction standards or water treatments, or both, or well construction prohibitions may apply. Anyone who proposes to

12.00

construct or reconstruct a well on this property is required to contact the Department of Natural Resources' Bureau of Drinking Water and Groundwater to determine what specific requirements are applicable prior to constructing or reconstructing a well on this property. No well may be constructed or reconstructed on this property unless applicable requirements are met.

This restriction is hereby declared to be a covenant running with the land and shall be fully binding upon all persons acquiring the above-described property whether by descent, devise, purchase or otherwise. This restriction benefits and is enforceable by, the Wisconsin Department of Natural Resources, its successors and assigns. The Department, its successors or assigns, may initiate proceedings at law or in equity against any person or persons who violate or are proposing to violate this covenant, to prevent the proposed violation or to recover damages for such violation.

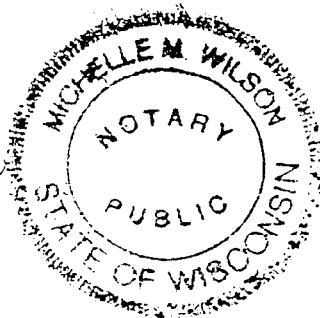
Any person who is or becomes owner of the property described above may request that the Wisconsin Department of Natural Resources or its successor issue a determination that the restriction set forth in this covenant are no longer required. Upon receipt of such a request, the Wisconsin Department of Natural Resources shall determine whether or not the restrictions contained herein can be extinguished. If the Department determines that the restrictions can be extinguished, an affidavit, with a copy of the Department's written determination, may be recorded to give notice that this groundwater use restriction is no longer binding.

IN WITNESS WHEREOF, the owner of the property has executed this Declaration of Restrictions, this 20<sup>th</sup> day of APRIL, 1999.

Signature: *Richard Mechanic*  
Printed Name: RICHARD MECHANIC

Subscribed and sworn to before me  
this 20<sup>th</sup> day of APRIL, 1999.

*Michelle M. Wilson*  
Notary Public, State of Wisconsin  
My commission 12-12-99



This document was drafted by Peter E. Pavalko of Advent Environmental Services, Inc., in conjunction with the Wisconsin Department of Natural Resources.

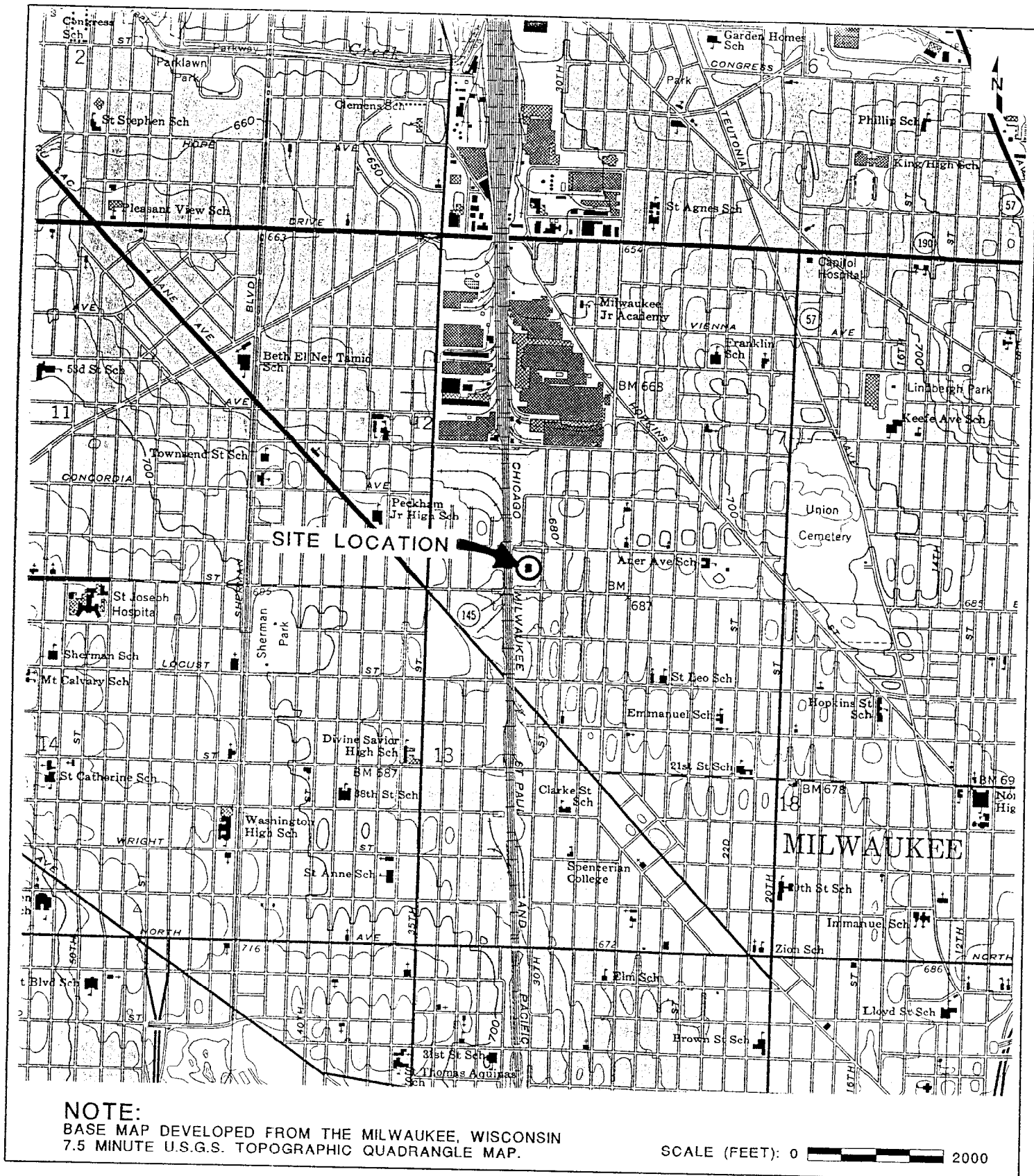


FIGURE 1 SITE LOCATION  
STANDARD SCRAP GARAGE  
MILWAUKEE, WISCONSIN



QUADRANGLE LOCATION  
SE1/4 SE1/4 SEC.12 T.7N., R.21E.

A D V E N T

ENVIRONMENTAL SERVICES, INC.

DATE: 1/6/97

DRAWING # 960103.02

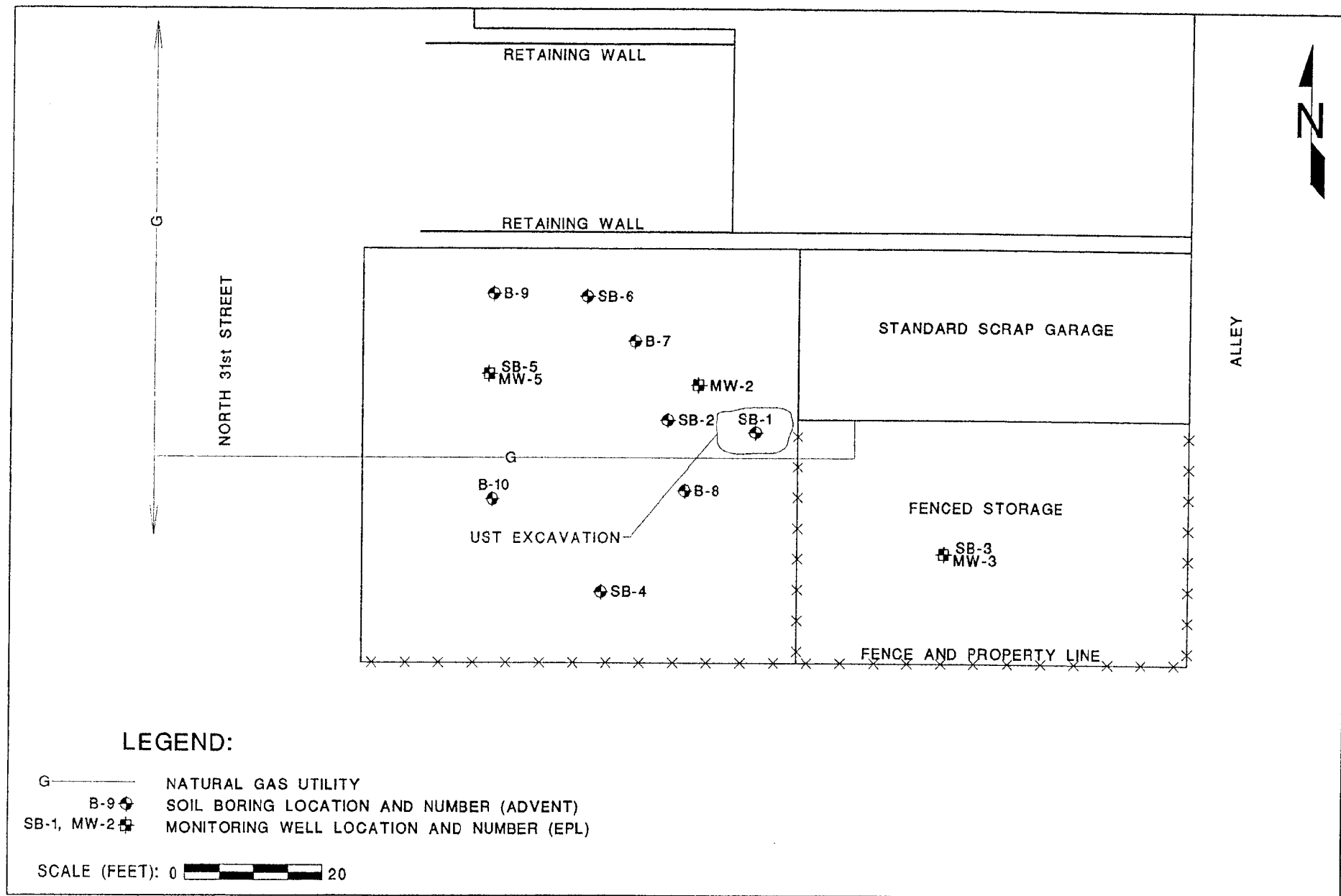


FIGURE 1 SOIL BORING LOCATIONS  
STANDARD SCRAP GARAGE  
MILWAUKEE, WISCONSIN

A D V E N T

ENVIRONMENTAL SERVICES, INC.  
DATE: 9/10/96  
DRAWING # 960103.01A

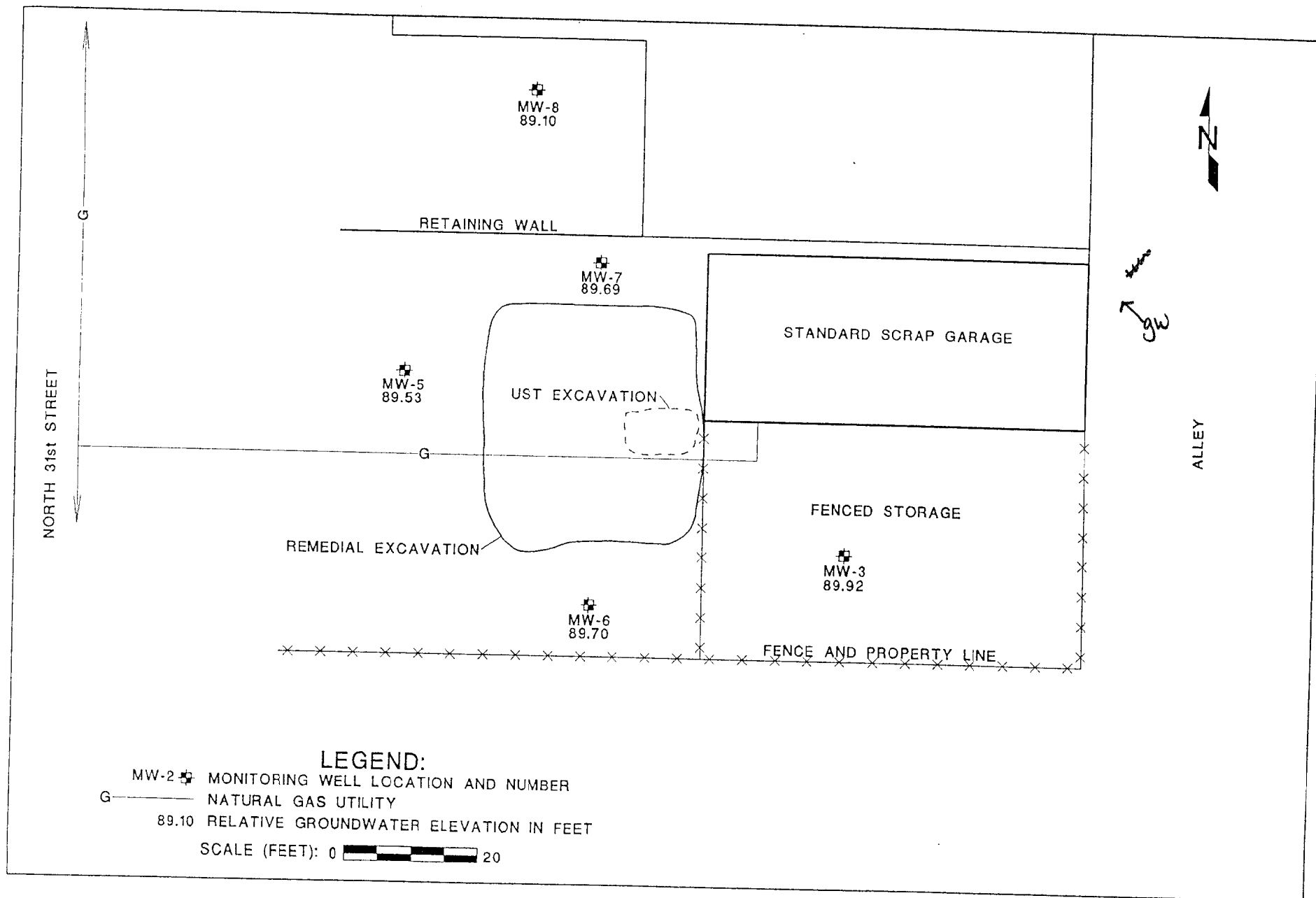


FIGURE 1 MONITORING WELL LOCATIONS  
STANDARD SCRAP GARAGE  
MILWAUKEE, WISCONSIN

**A D V E N T**  
ENVIRONMENTAL SERVICES, INC.  
DATE: 12/4/98  
DRAWING #960103.03A

**TABLE 1**  
**ANALYTICAL RESULTS - GROUNDWATER**  
**STANDARD SCRAP GARAGE SITE**

Sample	NR 140 PAL	NR 140 ES	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3
Monitoring Well			MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3
Date of Sample			6/7/95	1/22/97	4/11/97	7/7/97	10/27/97	1/9/98	4/14/98	7/9/98	10/20/98	1/19/99
DROs (ppb)			380	ND	350	ND	ND	ND	ND	ND	---	---
Rel. GW Elevation			---	89.42	90.07	92.48	89.19	90.57	92.13	90.78	89.92	89.36
<b>Natural Attenuation Parameters</b>												
Field DO (ppm)			---	0.32	0.30	0.6	0.79	0.51	0.30	0.30	0.60	0.65
Sulfate (ppm)			---	190	---	---	---	---	---	---	---	---
Nitrate-Nitrogen (ppm)			---	0.033	---	---	---	---	---	---	---	---
Dissolved Manganese (ppb)			---	1,500	---	---	---	---	---	---	---	---
Dissolved Iron (ppb)			---	19,000	---	---	---	---	---	---	---	---
<b>PVOCs (ppb)</b>												
Benzene	0.5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	140	700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MTBE	12	60	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	68.6	343	ND	ND	ND	ND	ND	0.55	ND	ND	ND	ND
1,2,4 TMB			ND	ND	ND	ND	ND	ND	ND	ND	2.4	ND
1,3,5 TMB			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	124	620	ND	ND	ND	ND	ND	0.88	ND	ND	ND	ND

Shaded areas indicate concentrations above NR 140.10 Groundwater Quality Enforcement Standard (ES)

Bolded values indicate concentrations above NR 140.10 Groundwater Quality Preventive Action Limits (PAL)

ND Not Detected

For laboratory detection limits, see Attachment 1.

TMB trimethylbenzene

MTBE Methyl-t-butyl ether

— Not analyzed



**TABLE 1**  
**ANALYTICAL RESULTS - GROUNDWATER**  
**STANDARD SCRAP GARAGE SITE**

Sample	NR 140 PAL	NR 140 ES	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5
Monitoring Well			MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5
Date of Sample			6/7/95	1/22/97	4/11/97	7/7/97	10/27/97	1/9/98	4/14/98	7/9/98	10/20/98	1/19/99
DROs (ppb)			730	200	380	ND	ND	ND	ND	120	---	---
Rel. GW Elevation			---	89.27	89.99	91.80	89.41	89.76	91.56	90.51	89.53	88.97
Natural Attenuation Parameters												
Field DO (ppm)			--	0.26	0.15	0.21	0.40	0.37	0.24	0.38	0.37	0.38
Sulfate (ppm)			---	22	---	---	---	---	---	---	---	---
Nitrate-Nitrogen (ppm)			---	0.038	---	---	---	---	---	---	---	---
Dissolved Manganese (ppb)			---	730	---	---	---	---	---	---	---	---
Dissolved Iron (ppb)			---	28,000	---	---	---	---	---	---	---	---
PVOCs (ppb)												
Benzene	0.5	5	22	11	12	ND	21	17	49	32	6.9	3.2
Ethylbenzene	140	700	ND	0.6	1.0	ND	ND	ND	ND	ND	ND	ND
MTBE	12	60	ND	4.5	14	ND	ND	ND	ND	ND	0.71	0.80
Toluene	68.6	343	1.8	1.2	1.1	ND	1.5	0.70	ND	0.72	ND	0.59
1,2,4 TMB			ND	0.4	1.9	ND	ND	ND	ND	ND	1.2	ND
1,3,5 TMB			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	124	620	1.6	2.9	2.0	ND	0.97	0.97	ND	0.74	0.53	0.56

Shaded areas indicate concentrations above NR 140.10 Groundwater Quality Enforcement Standard (ES)

Bolded values indicate concentrations above NR 140.10 Groundwater Quality Preventive Action Limits (PAL)

ND Not Detected

TMB trimethylbenzene MTBE Methyl-t-butyl ether

--- Not analyzed

**TABLE 1**  
**ANALYTICAL RESULTS - GROUNDWATER**  
**STANDARD SCRAP GARAGE SITE**

Sample	NR 140 PAL	NR 140 ES	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6
Monitoring Well			MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6
Date of Sample			1/22/97	4/11/97	7/7/97	10/27/97	1/9/98	4/14/98	7/9/98	10/20/98	1/19/99
DROs (ppb)			290	540	260	280	330	ND	ND	---	---
Rel. GW Elevation			89.39	90.20	93.02	89.21	90.06	91.82	90.63	89.70	89.04
Natural Attenuation Parameters											
Field DO (ppm)			0.20	0.10	0.15	0.39	0.32	0.19	0.30	0.47	0.40
Sulfate (ppm)			12	---	---	---	---	---	---	---	---
Nitrate-Nitrogen (ppm)			0.043	---	---	---	---	---	---	---	---
Dissolved Manganese (ppb)			640	---	---	---	---	---	---	---	---
Dissolved Iron (ppb)			7,800	---	---	---	---	---	---	---	---
PVOCs (ppb)											
Benzene	0.5	5	<b>38</b>	<b>93</b>	<b>140</b>	<b>90</b>	<b>110</b>	<b>96</b>	<b>74</b>	<b>60</b>	<b>11</b>
Ethylbenzene	140	700	35	45	41	40	2.3	42	40	15	0.52
MTBE	12	60	2.3	<b>18</b>	ND	ND	5.4	ND	ND	ND	ND
Toluene	68.6	343	2.6	8.3	ND	ND	1.6	ND	ND	ND	0.64
1,2,4 TMB			19	61	80	100	72	96	140	110	41
1,3,5 TMB			6.2	15	ND	ND	18	ND	ND	35	12
Total Xylenes	124	620	<b>173</b>	<b>140</b>	120	<b>250</b>	<b>180</b>	120	<b>140</b>	<b>290</b>	100

Shaded areas indicate concentrations above NR 140.10 Groundwater Quality Enforcement Standard (ES)

Bolded values indicate concentrations above NR 140.10 Groundwater Quality Preventive Action Limits (PAL)

ND Not Detected

TMB trimethylbenzene MTBE Methyl-t-butyl ether

--- Not analyzed

**TABLE 1**  
**ANALYTICAL RESULTS - GROUNDWATER**  
**STANDARD SCRAP GARAGE SITE**

Sample	NR 140 PAL	NR 140 ES	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7
Monitoring Well			MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7
Date of Sample			1/22/97	4/11/97	7/7/97	10/27/97	1/9/98	4/14/98	7/9/98	10/20/98	1/19/99
DROs (ppb)			1,200	1,200	ND	600	300	ND	470	---	---
Rel. GW Elevation			89.33	90.02	91.96	89.90	89.88	91.57	90.49	89.69	89.32
Natural Attenuation Parameters											
Field DO (ppm)			0.23	0.30	0.04	0.33	0.27	0.20	0.22	0.38	0.30
Sulfate (ppm)			11	---	---	---	---	---	---	---	---
Nitrate-Nitrogen (ppm)			0.032	---	---	---	---	---	---	---	---
Dissolved Manganese (ppb)			630	---	---	---	---	---	---	---	---
Dissolved Iron (ppb)			85	---	---	---	---	---	---	---	---
PVOCs (ppb)											
Benzene	0.5	5	<b>1,200</b>	<b>1,600</b>	<b>600</b>	<b>530</b>	<b>410</b>	<b>480</b>	<b>1,600</b>	<b>580</b>	<b>120</b>
Ethylbenzene	140	700	8.1	100	38	ND	ND	83	230	ND	8.0
MTBE	12	60	11	<b>52</b>	<b>40</b>	ND	ND	ND	ND	ND	11
Toluene	58.6	343	10	<b>250</b>	21	ND	ND	<b>87</b>	<b>92</b>	ND	1.3
1,2,4 TMB			190	220	92	210	220	92	280	230	75
1,3,5 TMB			52	63	30	ND	92	ND	53	ND	14
Total Xylenes	124	620	<b>471</b>	<b>910</b>	<b>220</b>	<b>520</b>	<b>490</b>	<b>270</b>	<b>720</b>	<b>490</b>	<b>160</b>

Shaded areas indicate concentrations above NR 140.10 Groundwater Quality Enforcement Standard (ES)

Bolded values indicate concentrations above NR 140.10 Groundwater Quality Preventive Action Limits (PAL)

ND Not Detected

For laboratory detection limits, see Attachment 1.

TMB trimethylbenzene

MTBE Methyl-t-butyl ether

--- Not analyzed

<p style="text-align: center;"><b>TABLE 1</b></p> <p style="text-align: center;"><b>ANALYTICAL RESULTS - GROUNDWATER</b></p> <p style="text-align: center;"><b>STANDARD SCRAP GARAGE SITE</b></p>							
Sample	NR 140 PAL	NR 140 ES	MW-8	MW-8	MW-8	MW-8	MW-8
Monitoring Well			MW-8	MW-8	MW-8	MW-8	MW-8
Date of Sample			1/9/98	4/14/98	7/9/98	10/20/98	1/19/99
DROs (ppb)			290	ND	1,200	---	---
Rel. GW Elevation			---	90.54	89.69	89.10	89.12
Natural Attenuation Parameters							
Field DO (ppm)			6.10	0.35	0.30	0.24	0.35
Sulfate (ppm)			---	---	---	---	---
Nitrate-Nitrogen (ppm)			---	---	---	---	---
Dissolved Manganese (ppb)			---	---	---	---	---
Dissolved Iron (ppb)			---	---	---	---	---
PVOCs (ppb)							
Benzene	0.5	5	ND	<b>38</b>	<b>39</b>	<b>3.6</b>	<b>4.0</b>
Ethylbenzene	140	700	ND	ND	ND	ND	ND
MTBE	12	60	ND	ND	ND	0.29	ND
Toluene	68.6	343	ND	ND	ND	ND	ND
1,2,4 TMB			1.0	ND	4.3	ND	ND
1,3,5 TMB			ND	ND	ND	ND	ND
Total Xylenes	124	620	0.68	ND	0.78	ND	ND

Shaded areas indicate concentrations above NR 140.10 Groundwater Quality Enforcement Standard (ES)

Bolded values indicate concentrations above NR 140.10 Groundwater Quality Preventive Action Limits (PAL)

ND Not Detected

For laboratory detection limits, see Attachment 1.

TMB trimethylbenzene

MTBE Methyl-t-butyl ether

--- Not analyzed

<b>TABLE 3</b> <b>ANALYTICAL RESULTS - GROUNDWATER</b> <b>STANDARD SCRAP GARAGE SITE</b>			
Sample	NR 140 PAL/ES	WB-9	WB-10
Boring Number		B-9	B-10
Date Sampled		7-24-96	7-24-96
VOCs <sup>1</sup> (ppb)			
Benzene	0.5/5	ND	ND
Ethylbenzene	140/700	ND	ND
Methyl-t-Butyl Ether	12/60	ND	ND
Tetrachloroethene	0.5/5	ND	<b>0.70</b>
Toluene	68.6/343	1.3	ND
1,2,4 TMB	—	ND	ND
1,3,5 TMB	—	ND	ND
Total Xylenes	124/620	1.1	0.54

← Water Sample  
from Temp. Geoprobe  
Boring

1 Only PVOCs and other VOCs detected are listed.

Bolding indicates values above the NR 140 preventive action limits (PAL)

ND Not Detected

(For laboratory detection limits, see Attachment 2)

TMB trimethylbenzene

Natural Attenuation Rate for Benzene  
MW-7  
Standard Scrap Garage

Sample Date	Month Number	Benzene Conc. (ppb)
1/22/97	1	1,200
4/11/97	4	1,600
7/7/97	7	600
10/27/97	10	530
1/9/98	13	410
4/14/98	16	480
7/9/98	19	1,600
10/20/98	22	580
1/19/98	25	120

ppb = parts per billion

Solve for PAL

Formula of trendline from graph:  $y = 1311.5e^{-0.0577x}$

y = conc. At time x (PAL = 0.5 ppb)

x = time (unit months)

Solution:

1.  $0.5 = 1311.5e^{-0.0577x}$

2.  $\ln(0.5/1311.5) = \ln(e^{-0.0577x})$

3.  $-7.87 = -0.0577x$

4.  $X = 136$  months, or 11.3 years, or May 2008.

Solve for ES

Formula of trendline from graph:  $y = 1311.5e^{-0.0577x}$

y = conc. At time x (ES = 5 ppb)

x = time (unit months)

Solution:

1.  $5 = 1311.5e^{-0.0577x}$

2.  $\ln(5/1311.5) = \ln(e^{-0.0577x})$

3.  $-5.57 = -0.0577x$

4.  $X = 96.5$  months, or 8 years, or January 2005.